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ABSTRACT

Organizational conflict theory asserts that when organizational homeostasis becomes unbalanced, the participants in the conflict should communicate more. To test this assertion, the average total frequency of principal-teacher oral and written communications over an identical 20-day period were correlated with two empirically-determined variables--school organizational climate (explaining the nature of homeostasis) and teacher esprit (the degree of teacher satisfaction or morale). Thirty-seven cooperating Ohio elementary schools and their respective faculties formed the sample. The basic assumption was not upheld and further refined statistical analyses of the data also failed to lend it additional support. (Author)

Organizational Climate and Frequency of Principal-Teacher Communications in Selected Ohio Elementary Schools *

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Central to a changing system of interaction is the process of communication. Communication aids or hinders goal achievement within the organization and it affects group membership (3:534). Because the frequency of principal-teacher communications in the public elementary might have been a determinant in the school's organizational climate as well as its teacher esprit (morale), a hypothesis was tested, namely: that the total frequency of oral and written communications between the principal and his faculty collectively as well as downward from the principal to the faculty and upward from the faculty to the principal were significantly ($p < .05$) related to the nature of the school's organizational climate as well as the faculty's esprit (morale).

Methodology

The nature of a school's organizational climate and the degree of its faculty's esprit can be determined through the work of Halpin. Describing the school's organizational climate as the organizational personality of the school, Halpin through factor analysis derived six profiles or prototypic organizational climates for the elementary

school. These profiles, moreover, arranged themselves along a continuum from open to autonomous, controlled, familiar, paternal, and closed prototypic climates. Three parameters were also discovered in describing the social interaction between an elementary principal and his faculty: authenticity, satisfaction, and leadership initiation. The first, said Halpin, defined the "openness" of the behavior between the principal and his faculty; the second, "the attainment of conjoint satisfaction in respect to task accomplishment and social needs"; and the third, the latitude with which the principal as well as the faculty initiated leadership acts.

In this investigation, the primary concern was with the second conceptualization, "the conjoint satisfaction in respect to task accomplishment and social needs." For the faculty, this resulted in esprit (moral), but it was not the sole determinant in the school's organizational climate, but rather eight behavioral patterns, four belonging to the principal and four to the faculty, covarying among themselves, identified the school's organizational climate as being one of the six-open, autonomous, controlled, familiar, paternal, or closed. Halpin labeled the four principal behaviors as thrust, production emphasis, aloofness, and consideration and the four faculty behaviors as esprit, intimacy, disengagement and hindrance (4). His Organizational Climate Description Questionnaire (OCDQ) identified the

school's organizational climate through these eight subdimensions.

Data on the viability of the construct, school organizational climate were contained in the sources listed below (3). Reliability data have been reported by Halpin and Anderson as follows:

Halpin's Estimates of Internal Consistency and of Equivalence for the Eight OCDQ Subdimensions (5:49)

OCDQ Subtests	Split-half Coefficient of Reliability, Corrected by the Spearman-Brown Formula[a] (N = 1,151)	Correlation Between Scores of the Odd-Numbered and the Even-Numbered Respondents in Each School[b] (N = 71)	Communality Estimates[c] for Three-Factor Rotational Solution (N = 1,151)
Disengagement	.73	.59	.66
Hindrance	.68	.54	.44
Esprit	.75	.61	.73
Intimacy	.60	.49	.53
Aloofness	.26	.76	.72
Production Emphasis	.55	.73	.53
Thrust	.84	.75	.68
Consideration	.59	.63	.64

[a] Estimate of internal consistency.

[b] Estimate of equivalence.

[c] These are lower-bound, conservative estimates of equivalenc.

The acceptable reliability of the OCDQ was again demonstrated by Anderson who in a test-retest Pearsonial r correlation as well as an odd-even respondent Pearsonian r with a Minnesota sample obtained the following reliability coefficients $p < .01$) (1:81).

Anderson's Reliability Coefficients

	Test-Retest Pearsonian r	Pearsonian r Correlation of Odd-Even Responsents
Disengagement	+.567	+.541
Hingrance	+.458	+.791
Esprit	+.805	+.685
Intimacy	+.653	+.668
Aloofness	+.196	+.708
Production Emphasis	+.787	+.692
Thrust	+.504	+.763
Consideration	+.805	+.556

The Principal's Data Sheet (PDS) was designed to obtain the frequency of various types of oral and written communications between a principal and his faculty, but for this investigation, the average of the total frequency of communications over a twenty day period in each school within the sample became the sole measure. By type of communication in a pilot study, item reliability coefficients were significant at least at the .05 level, while the odd-even respondent reliability coefficient for the whole PDS was .82, significant at the .01 level (6:37-39).

The population consisted of the 3,107 elementary schools listed in the 1966-67 Educational Directory of the State of Ohio (7). Proportionate random sampling by type of school allowed the mailing of seventy-two requests to

city schools, sixty requests to county schools, and eight requests to exempted village schools. Fifty-two principals replied that they were willing to cooperate. Thirty-seven principals actually completed the PDS, the other fifteen failing to respond to a tracer letter after the instruments had been mailed to them.

Each cooperating principal was sent ten copies of the OCDQ and was asked to distribute them randomly among his faculty. The per cent of return by school ranged from seventy to one hundred per cent with the exception of three schools. By thus sampling generally fifty per cent or more of the eligible faculty population within each of the thirty-seven schools, a high degree of precision could be attained in inferring to the whole faculty of each school (2:3). For the total sample, 310 OCDQ's were returned of the 645 sent to the cooperating principals, this representing a 47 per cent response for the total sample.

Of the thirty-seven schools in the sample, twenty-one were city schools; thirteen, county schools; and three, exempted village schools. No discernible reason could be given about the fifteen principals who failed to reply to the tracer letter other than that eight were from city schools, six from county schools, and one from an exempted village school. That these principals failed to reply may have biased the sample as well as the procedure employed whereby each cooperating principal selected the teachers to whom he passed out the OCDQ's.

The nonparametric Spearman (rho) rank correlation coefficient was selected as the main statistic for it was a distribution free statistic and had about a 91 per cent efficiency of the Pearson correlation coefficient in rejecting a null hypothesis. Since the sample, as indicated above, may have become biased, the rho correlation coefficient seemed to be the more appropriate statistic to apply to the obtained data. But, in addition, althought the OCDQ itself was a summated (Likert) - type equal interval scale, the PDS, as constructed, did not meet the interval scale requirement, but involved ordinal measurement instead. Therefore, again the Spearman rho, not the Pearson r, seemed to be the more appropriate correlational statistic (9:202-213).

RESULTS

I. SPEARMAN RANK CORRELATIONS BETWEEN THE FREQUENCY OF TOTAL PRINCIPAL-TEACHER COMMUNICATIONS, THE FREQUENCY OF PRINCIPAL DOWNWARD COMMUNICATIONS TO THE FACULTY, THE FREQUENCY OF TEACHER UPWARD COMMUNICATIONS TO THE PRINCIPAL AND THE OCDQ ESPRIT MEAN SCORES

Table I shows the results. The rho correlation by school between the frequency of total principal-teacher

communications and the OCDQ esprit mean scores was .21, between the frequency of principal downward communications to the faculty .28, and between the frequency of teacher upward communications to the principal .31. A rho correlation of .39 was needed in each of these three instances at the .05 level of acceptance on a one-tailed test.

TABLE I

SPEARMAN RANK CORRELATIONS BETWEEN THE FREQUENCY OF TOTAL PRINCIPAL-TEACHER COMMUNICATIONS, THE FREQUENCY OF PRINCIPAL DOWNWARD COMMUNICATIONS TO THE FACULTY, THE FREQUENCY OF TEACHER UPWARD COMMUNICATIONS TO THE PRINCIPAL AND OCDQ ESPRIT MEAN SCORES

	OCDQ Esprit Mean Scores
Frequency of Total Principal-Teacher Communications	.21
Frequency of Principal Downward Communications to the Faculty	.28
Frequency of Teacher Upward Communications to the Principal	.31

None of the above rho's significant at the .05 level of acceptance on a one-tailed test.

II. SPEARMAN RANK CORRELATIONS BY OPEN AND CLOSED SCHOOL CLIMATE BETWEEN THE FREQUENCY OF TOTAL PRINCIPAL-TEACHER COMMUNICATIONS AND THE OCDQ ESPRIT MEAN SCORES.

The sample yielded six open, five autonomous, three controlled, no familiar, five paternal and eighteen closed climate schools.

Brown and Watkins in their own research both had raised some doubt about Halpin and Croft's intermediate

school climate designations of controlled and familiar. Brown identified with his Minnesota sample all six categories of school climates, except the category, controlled climate (2:passim). Watkins with a Muscogee County School District, Georgia sample raised some doubt about the two middle school climate categories, controlled and familiar (10:52).

The Brown and Watkins findings are mentioned in order to justify in this investigation the correlation in the open and closed school climate categories only, the extremes of the Halpin and Croft school climate continuum and not the four remaining intermediate school climate categories of autonomous, controlled, familiar and paternal. This is also in keeping with the view of Halpin and Croft:

> We have said that these climates have been ranked in respect to openness versus closedness. But we fully recognize how crude this ranking is. As is the case in most methods of ranking or scaling, we are much more confident about the climates described at each end of this listing than we are about those described in between (5:50).

Table II shows the results. The rho between frequency of total principal-teacher communications and the OCDQ esprit mean scores in the open climate schools was - .09 and in the closed climate schools .27. At the .05 level of acceptance in both instances, a rho correlation of at least .83 was needed for the open climate schools and a

rho correlation of at least .40 for the closed climate schools on a one-tailed test.

TABLE II

SPEARMAN RANK CORRELATIONS BY OPEN OR CLOSED SCHOOL CLIMATE BETWEEN THE FREQUENCY OF TOTAL PRINCIPAL-TEACHER COMMUNICATIONS AND THE OCDQ ESPRIT MEAN SCORES

Open Climate Schools	$r_S = -.09$	(N = 6)
Closed Climate Schools	$r_S = .27$	(N = 18)

None of the above rho's significant at the .05 level of significance on a one-tailed test.

DISCUSSION

With no significant correlational findings ($p < .05$) between the total frequency of principal-teacher communications and teacher esprit (morale), nor between the frequency of principal downward communications to his faculty and teacher esprit, nor between the frequency of teacher upward communications to their principal and teacher esprit, nor between the total frequency of principal-teacher communications and teacher esprit in the open and closed climate schools what inferences could be safely drawn from these data?

Perhaps principal-teacher communications might involve characteristics other than merely oral or written attributes. To hold that all communication was entirely verbal communication, said Halpin, was perhaps fallacious for "actions spoke louder than words." (4:253)

Even with the low level of overt behavior herein, that is, the frequency of oral or written behavior either by the principal or his faculty, no significant differences were obtained. If overt behavior, either by the principal or his faculty, were largely communicative behavior and this in turn were related to organizational morale or climate, there was nothing in this educational setting of the elementary school with its principal and its faculty, at least with this sample, to so support such a generalization. In organizational conflict theory, some held that "people ought to communicate more" when conflict arose and thus human relations and human morale would ipso facto improve. These findings here might suggest otherwise. "If we are looking for laws of human behavior," said DiRenzo, "then our concepts must be more than sets of operations, or mathematical formulas, or of logical realities, or of sheer descriptions. They must have empirical and not merely rational implications" (8:268). That during organizational conflict, the interested participants "should communicate more" might suggest a form of rationality, but this assertion must also be subjected to empirical confirmation. In this investigation, the role of conflict was not directly studied except that the closed climate school suggested little organizational homeostasis when contrasted to the open school climate. But more so, was there really a relationship between communicative behavior and any other organizational variable, including morale?

FOOTNOTES

*This is a shorter version of the author's unpublished doctoral dissertation under the same title, University of Akron, 1969 and also a part of Research Grant OEG-0-8-08005-3715, "An Analysis of the Relationship of the Degree of Satisfaction of Teachers Within Certain Ohio Schools with the Formal Communication of Their Principal," Bureau of Research, Office of Education, U. S. Department Health, Education, and Welfare, Region V, Chicago, Illinois, 1969. A version of this paper was also presented under the same title at the annual meeting of the American Educational Research Association, Los Angeles, California, 1969.

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